

SOLAR STORM

Solar Storms, also referred to as geomagnetic storms, are a type of Space Weather that result in a major disturbance of Earth's magnetosphere that occurs when there is a very efficient exchange of energy from the solar wind into the space environment surrounding Earth. Space weather is generally divided into four components: solar flares, coronal mass ejections (CMEs), high speed solar wind, and solar energetic particles. Geomagnetic Storms are most relevant to Howard County and are classified under coronal mass ejections. These storms can cause disturbances in the electric power grid, which could negatively impact homes and businesses in the County.



HAS IT HAPPENED LOCALLY?

There have been no notable occurrences of Solar Storm events significantly impacting Howard County.

WHAT IS THE ONGOING RISK?

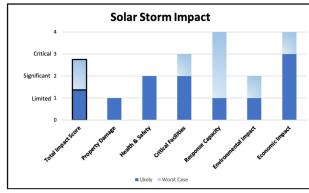
There is an expected 0-10% Chance of Annual Occurrence of a Solar Storm event in Howard County. In the most likely Solar Storm scenario, the Total Impact is considered Limited-Significant. In the worst case scenario, the Total Impact is considered Significant-Critical.

DID YOU KNOW?

- A Solar Storm in 1859, known as the "Carrington Event," was one of the strongest coronal mass ejections in recorded history. Telegraph systems failed across Europe and North America.
- In 1972, a Solar Storm knocked out longdistance phone communications across the United States.

FOR MORE INFORMATION:

- <u>Howard County Hazard Identification and Risk</u> Assessment
- <u>National Oceanic and Atmospheric</u> <u>Administration</u>
- Ready.gov



Solar Storm Risk Profile				
LIKELIHOOD	Risk Assessment Category	Likely Hazard Scenario	Worst-Case Hazard Scenario	Weight
	Likelihood	1.25 Unlikely- Infrequent		50%
CONSEQUENCE	Impact	1.3 Limited-Significant	2.7 Significant-Critical	40%
	Warning Time	1 Very Long	1 Very Long	5%
	Duration	3 Long	3 Long	5%
TOTAL RISK SCORE		1.3	1.9	

